REMARKS:

Reexamination and reconsideration of the rejections are hereby requested.

Claims 1-27 are pending in this application and claims 1-9, 12 and 17-25 stand rejected. Claims 10, 11, 13-16, 26 and 27 are objected to. In particular, claims 1-9 and 12 are rejected under 35 U.S.C. § 102(b) as being anticipated by Kobayashi, EP 1378644. Claims 17-21, 24 and 25 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Bromberg, *et al.*, U.S. patent number 6,981,472. Finally, claims 22 and 23 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Bromberg in view of Kobayashi.

As noted above, claims 1-9 and 12 have been rejected under 35 U.S.C. § 102(b) as being anticipated by Kobayashi, European patent application number EP 1378644 A2. We note that this European patent application was published on January 7, 2004, a mere five days before the January 12, 2004 filing date of the present patent application. Because the Kobayashi European publication was not available to the public more than a year before the present patent application was filed, it is submitted that the 35 U.S.C. § 102(b) rejection is in error. It is assumed that the examiner intended to reject the claims under 35 U.S.C. § 102(a) in that the European patent application was published only five days before the present patent application was filed.

Enclosed herewith is a 37 C.F.R. § 1.131 declaration of Daniel R. Cohn, one of the inventors herein. This declaration establishes that the invention was conceived in this country prior to January 7, 2004, the effective date of the Kobayashi reference. A draft application was prepared, reviewed and revised by the inventors, and filed on January 12, 2004. It is therefore submitted that the accompanying 131 declaration removes Kobayashi as a reference.

With the removal of the Kobayashi reference it is submitted that claims 1-9 and 12, and claims 22 and 23 are allowable in that the rejections of these claims rely on Kobayashi alone or in combination with one other reference. Reconsideration is requested.

Claims 17-21, 24 and 25 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Bromberg, et al., U.S. patent number 6,981,472. Reconsideration is requested. Independent claim 17 is directed to a high compression ratio, homogeneous charge compression ignition

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engine operating on a high cetane fuel along with the addition of hydrogen or a hydrogen/carbon monoxide mixture at low-to-mid-load levels. It is submitted that the subject matter of claim 17 is not disclosed by Bromberg, *et al.*

Bromberg, et al., is directed to homogeneous charge compression ignition control utilizing plasmatron fuel converter technology. In particular, this patent teaches running an internal combustion engine with fuel partially reformed by an onboard fuel reformer. The patent teaches a method and means for controlling operation of an HCCI engine, addresses startup and transients, increases the operating window of the engine, and decreases noise during operation. It is submitted that Bromberg, et al., does not disclose operating an engine on a high cetane fuel along with the addition of hydrogen at low-to-mid-load levels. The examiner is asked to point out such teaching in Bromberg, et al.

In summary, the enclosed 37 C.F.R. § 1.131 declaration of Daniel R. Cohn removes the Kobayashi reference from this prosecution. Further, it has been pointed out that the limitations in independent claim 17 are not met by the teachings in the Bromberg, *et al.*, patent.

For the foregoing reasons, it is submitted that the pending claims are in condition for allowance and early favorable action is requested.

Please charge any additional fees associated with this filing, or apply any credits, to our Deposit Account No. 03-1721.

Respectfully Submitted,

CHOATE, HALL & STEWART LLP

Date: August 3, 2006

Sam Pasternack, Esq. Reg. No. 29,576

PATENT DEPARTMENT CHOATE, HALL & STEWART LLP Two International Place Boston, Massachusetts 02110 Telephone: (617) 248-5000 Facsimile: (617) 248-4000

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